

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Duraco Products, Inc.  
Attn: Robert Braun  
1109 East Lake Street  
Streamwood, Illinois 60107

Application No.: 76060099

I.D. No.: 031805AAG

Applicant's Designation:

Date Received: March 22, 2004

Subject: Plastic Product Manufacturing Plant

Date Issued: April 23, 2004

Expiration Date: March 5, 2006

Location: 1109 East Lake Street, Streamwood

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of five resin pellets storage and three surge bins, eighteen injection molding machines, one silicon mold making line, three polyurethane ware molding lines with three barrier coating lines, two plastic coating lines, four plastic grinders each controlled by dust collector, and two natural gas fired engine/generators pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled HAP). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) issued for this location.
2. Operation and emissions of the silicon mold making and polyurethane ware molding operations shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>Emission Factor</u> (Lb/Tons)	<u>VOM Emissions</u>	
	(Tons/Mo)	(Tons/Yr)		(Lb/Mo)	(Ton/Yr)
<u>Polypropylene:</u>					
Silicon/Catalyst	17	136	12.0	204	0.8
Silicon Mold Release	0.2	1.2	250.0	50	0.1
Silicon Mold Rejuvenator	0.3	2.1	1,400	420	1.5
Polyol/Isocyanate	150	1,200	3.2	480	1.9
Polyurethane Mold Release	15	100	9.7	146	<u>0.5</u>
				Total	4.8

These limits are based on the maximum production rate and the polyurethane manufacturing industry emission factors. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

3. VOM emissions from plastic injection molding operations shall not exceed 0.4 tons/month and 2.5 tons/year.

The VOM emissions shall be determined from the following equation:

$$E = \sum (P_i \times C_i)$$

Where:

E = VOM emissions (tons)

P<sub>i</sub> = Plastic i usage (tons)

C<sub>i</sub> = VOM emission factor of i plastic provided by plastic manufacturer (wt. fraction). The following C<sub>i</sub> shall be used:

Polypropylene Copolymer	0.16 lbs/ton
Polypropylene Homopolymer	0.4 lbs/ton
Polystyrene	0.11 lbs/ton
Polyethylene	0.07 lbs/ton

Compliance with annual limits shall be determined from a running total of 12 months of data.

- 4a. This permit is issued based on plastic coating operations being subject to limitations of 35 Ill. Adm. Code Part 218, Subpart G: Use of Organic Material. The VOM emissions from coating operations shall not exceed 3.6 kg/hr (8 lb/hr).
- b. VOM emissions from plastic and barrier coating operations shall not exceed 1.1 tons/month and 8.4 tons/year.

The VOM emissions shall be determined from the following equation on a monthly basis:

$$E = \sum (M_i \times C_i)$$

Where:

E = VOM Emissions (tons)

M<sub>i</sub> = VOM-Containing Raw Material Usage (tons)

C<sub>i</sub> = VOM Content of the Raw Material (wt. %)

5. Operation and emissions of the two natural gas fired engine/generators (combined) shall not exceed the following limits:

Natural Gas Usage: 6.0 mmscf/month, 57.2 mmscf/year

<u>Pollutant</u>	<u>Emission Factor (Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Nitrogen Oxide (NO <sub>x</sub> )	568	1.7	16.2
Carbon Monoxide (CO)	401	1.2	11.5
Volatile Organic Material (VOM)	140	0.4	4.0

These limits are based on the maximum production rate and engine manufacturer's emission factors. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

6. This permit is issued based on negligible emissions of particulate matter from the resin pellets storage and surge bins and the plastic grinders. For this purpose emissions from each emission source shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 ton/year.
7. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
8. The Permittee shall maintain monthly records of the following items:
  - a. Names and amounts of raw material used at the facility (tons/mo, tons/yr);
  - b. VOM and HAP content of raw materials used (wt. %);
  - c. Natural gas usage by engine/generators (mmscf/mo, mmscf/yr); and
  - d. VOM and HAP emission calculations (tons/mo, tons/yr).
9. All records and logs required by this permit shall be retained at a easily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA request for records during the course of a source inspection.

10. If there is an exceedance of the requirements of this permit as determined by the record required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the record keeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
11. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: names and amounts of raw materials used (tons/year) and their VOM and HAP content (wt %).
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
9511 West Harrison  
Des Plaines, Illinois 60016

It should be noted that this permit has been revised to clarify the number and configuration of emission units and to reflect replacement of one polyurethane molding line described in Construction Permit 04040032 without any increase in the usage of raw materials and/or emissions of regulated air pollutants above the previously permitted limits. This revision does not relax monitoring, recordkeeping, or reporting requirements contained in federally enforceable conditions of this permit. These permit conditions assure that this source would not be a major source for purpose of CAAPP.

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

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cc: Illinois EPA, FOS Region 1  
Illinois EPA, Compliance Section  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Plastic Product Manufacturing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from both plants. This is processing 21,340 tons of plastic resins, usage 15,000 gallons of paint and 1,500 gallons of clean-up solvents, burning 57.2 mmscf of natural gas in engine/generators per year. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

<u>Emission Units</u>	E M I S S I O N S (Ton/Year)				
	<u>VOM</u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>Single Hap</u>	<u>Total HAP</u>
Mold Making	2.4				
Polyurethane Molding	2.4				
Plastics Molding	2.5				
Plastics Coating	8.4				
Engine/Generators	<u>4.0</u>	<u>16.2</u>	<u>11.5</u>		
Plant-Wide Total	19.7	16.2	11.5	< 10	< 25

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